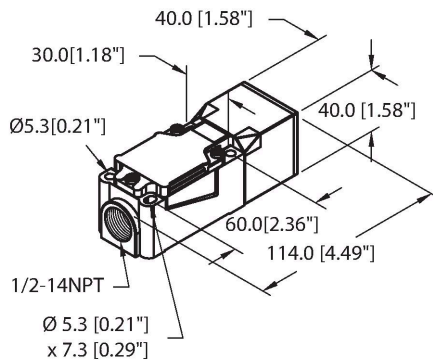


BI30U-CP40-AP6X2/S10

Inductive Sensor – With Extended Switching Distance



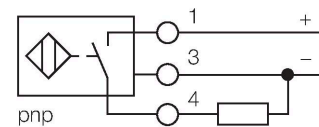
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum visibility of operating-voltage display and switching state in any installation position
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large coverage
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Terminal chamber

Technical data

Type	BI30U-CP40-AP6X2/S10
ID	1625825
Special version	S10 Corresponds to: Mounting base with 1/2-14NPT thread
General data	
Rated switching distance	30 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}

Wiring diagram



Functional principle

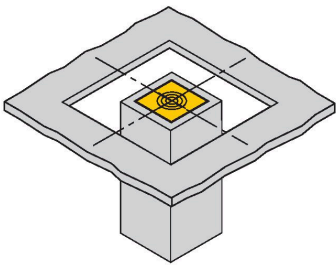
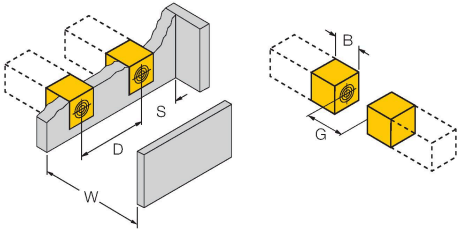
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Switching frequency	0.25 kHz
Mechanical data	
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²
Environmental conditions	
Ambient temperature	-10...+60 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	2 × LEDs, Green
Switching state	2 × LEDs, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	80 mm
Distance W	90 mm
Distance S	40 mm
Distance G	180 mm
Width active area B	40 mm

When installing the sensor in an aperture plate (sheet metal, e.g., a step plate) the sensor must be fully embedded in metal for reliable detection of the target.

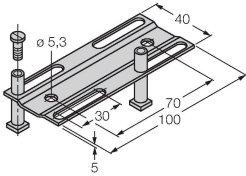
BI30U-CP40-AP6X2/S10| 02/21/2025 13-40 | technical changes reserved

Accessories

JS025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

Mounting clamp for rectangular
housings 40 x 40 mm; material:
Polypropylene

